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Dec 15, 1998

DERWENT-ACC-NO: 1999-099792

DERWENT-WEEK: 199909

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TITLE: Vibratory filling equipment for moulding sand for lost foam casting -
has attachment height position of excitation motors and clamps set at centre of
gravity position of flask filled with pattern and moulding sand

PATENT-ASSIGNEE:

ASSIGNEE

ISUZU MOTORS LTD

CODE

ISUZ

PRIORITY-DATA: 1997JP-0140213 (May 29, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 10328783 A	December 15, 1998	N/A	006	B22C015/10

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP10328783A	May 29, 1997	1997JP-0140213	N/A

INT-CL (IPC): B22C 15/10

ABSTRACTED-PUB-NO: JP10328783A

BASIC-ABSTRACT:

NOVELTY - The attachment height position of excitation motors (16) and clamps (8) on vertical walls (7a,7b) of a support (6) is fixed equal to the height of centre of gravity position (19) of a flask (3) filled with loss foam pattern (1) and moulding sand (2).

DETAILED DESCRIPTION - A lost foam pattern (1) and molding sand (2) are accommodated in the molding flask (3) mounted on a support. The flask is clamped from both sides by clamps (8) provided on the right and left vertical walls (7a,7b) of a support (6). The vertical walls of the support are respectively equipped with excitation motors (16).

USE - For filling moulding sand in lost foam casting.

ADVANTAGE - The height position difference from the centre of gravity position (19) of the flask to the vibratory point of the motors and clamps becomes zero. A uniform circular motion of the molding sand is securable corresponding to frequency of excitation motors in the flask since relative shake between the flask and the vibratory point becomes small. The rigidity of the flask need not be enhanced. Cost reduction can be achieved. A high holding capacity can be demonstrate d with simple clamps. DESCRIPTION OF DRAWING(S) - The drawing explains the plan (a) and the side view (b) of the oscillation molding sand filling equipment. (1) Lost form pattern; (2) Molding sand; (3) Flask; (6)

Support; (7a,7b) Vertical walls; (8) Clamp; (16) Excitation motor; (19) Centre of gravity position.

CHOSEN-DRAWING: Dwg.1/5

TITLE-TERMS: VIBRATION FILL EQUIPMENT MOULD SAND LOST FOAM CAST ATTACH HEIGHT
POSITION EXCITATION MOTOR CLAMP SET CENTRE GRAVITY POSITION FLASK FILLED
PATTERN MOULD SAND

DERWENT-CLASS: M22 P53

CPI-CODES: M22-E;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1999-029745

Non-CPI Secondary Accession Numbers: N1999-072887

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USPT	116 and sand and vibration and foam	33	L19

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